



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 6457/3
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Silver Lake (Integra) Pty Ltd

1.3. Property details

Property: Mining Leases 25/71, 25/236 and 25/371
Local Government Area: City of Kalgoorlie-Boulder
Colloquial name: Santa Deposit Project

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
220		Mechanical Removal	Mineral Production

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 7 April 2022

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description The vegetation of the application area is broadly mapped as the following Beard vegetation associations:
501: Medium woodland; goldfields blackbutt; and
506: Succulent steppe with woodland; salmon gum & bluebush.

Outback Ecology (2013) conducted a flora and vegetation survey of the application area and surrounds (covering approximately 1,323 hectares) in January 2013. Five vegetation associations were recorded within the application area:

Eg(Ec)TM: *Eucalyptus griffithsii* (\pm *E. celastroides*) Tree Mallee or Woodland over *Maireana sedifolia* Low Open Shrubland over *Austrostipa* and *Sida spodochroma* Scattered Grasses/Herbs on plains and low rise of orange and pale brown clays with up to 50% cover of greywacke and calcrete rocks up to 20cm in size;

AbEaTSL: *Acacia colei* var. *colei* high shrubland over *Triodia epactia* and *Triodia wiseana* hummock grassland and **Cenchrus ciliaris* open tussock grassland in drainage lines on low broad ridges and minor drainage lines of orange brown clay with up to 75% cover of calcrete, ironstone, greywacke and quartz rocks up to 50 cm in size;

EsEmW: *E. salmonophloia* \pm *E. moderata* Woodland over *Maireana sedifolia*, *M. triptera*, *Atriplex nummularia* Low (Open) Shrubland over *Sclerolaena* spp., *Austrostipa* spp. and *Sida spodochroma* Scattered Grasses/Herbs on undulating plains of light brown clay loam with up to 20% cover of quartz and calcrete rocks up to 10cm in size;

EaLOW: *Eremophila alternifolia* Low Open Woodland over *Maireana sedifolia* Low Open Shrubland over *Austrostipa* sp. Scattered Grass on plains of light brown clay loam with up to 5% cover of calcrete, quartz and greywacke up to 7cm in size;

EIW: *Eucalyptus lesouefii* (\pm *E. salmonophloia*) Woodland over *Eremophila alternifolia* Scattered Low Trees over *Maireana sedifolia* Scattered Low Open Shrubland on broad hills and plains of light brown clay with scattered quartz.

Clearing Description Santa Deposit Project.
Silver Lake (Integra) Pty Ltd (Silver Lake) proposes to clear up to 220 hectares of native vegetation within a boundary of approximately 892.928 hectares, for the purpose of mineral production. The project is located approximately 54 kilometres north-east of Kambalda (East), within the City of Kalgoorlie-Boulder.

Vegetation Condition Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery, 1994);
To
Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994).

Comment

The vegetation condition was derived from a vegetation survey conducted by Outback Ecology (2013) and Botanica Consulting (2021).

Clearing permit CPS 6457/1 was granted by the Department of Mines and Petroleum (now the Department of Mines, Industry Regulation and Safety (DMIRS)) on 26 March 2015 and was valid from 18 April 2015 to 18 April 2020. The permit authorised the clearing of up to 84 hectares of native vegetation within a boundary of approximately 101 hectares, for the purpose of mineral production.

CPS 6457/1 was amended on 14 November 2019, extending the duration of the permit from 18 April 2020 to 30 April 2025. The proposed clearing area remained unchanged at 84 hectares.

On 17 February 2021, the permit holder applied to include additional tenure, increase the amount of approved clearing and increase the permit boundary.

3. Assessment of application against Clearing Principles

(a) Native vegetation should not be cleared if it comprises a high level of biodiversity.

Comments**Proposal is not likely to be at variance to this Principle**

The amendment area is located within the Coolgardie Interim Biogeographic Regionalisation of Australia (IBRA) region and the Eastern Goldfields subregion (GIS Database). The Eastern Goldfields subregion is comprised of undulating plains interrupted by low hills and ridges, supporting Mallees, Acacia thickets and shrub-heaths on sandplains, and Eucalypt woodlands around salt lakes, on ranges, and in valleys (CALM, 2002).

A flora, vegetation and fauna assessment was conducted by Outback Ecology in 2013 covering an area of approximately 1,323 hectares (Botanica Consulting, 2021; Outback Ecology, 2013). A total of five vegetation associations were recorded within the application area, which ranged from Very Good to Completely Degraded condition (Keighery, 1994; Outback Ecology, 2013). No Threatened or Priority flora have been recorded within the application area (Botanica Consulting, 2021; Outback Ecology, 2013).

None of the five vegetation associations recorded in the application area represented a Threatened Ecological Community (TEC) which is consistent with available databases (GIS Database). The Priority 3 PEC Mount Belches *Acacia quadrimarginea* / *Ptilotus obovatus* banded ironstone community occurs within the application boundary, occupying approximately 4.8% (~63.5 ha) of the broader survey area (Botanica Consulting, 2021; Outback Ecology, 2013; GIS Database). This consisted of vegetation units associated with Banded Ironstone Formations (BIF) and BIF outwash geology of the Mount Belches Range and was present in the southern section of the application area (Outback Ecology, 2013). Mining infrastructure has been designed to avoid clearing of the PEC3 "Mount Belches *Acacia quadrimarginea*/ *Ptilotus obovatus* (Banded Ironstone Formation)" and less than 0.8 ha of the PEC will be impacted by the open pit and abandonment bund.

A total of 105 flora taxa comprising 24 families and 48 genera were recorded by Outback Ecology within the study area (Botanica Consulting, 2021; Outback Ecology, 2013). This level of flora diversity is comparable to other surveys that have been conducted in the region (Outback Ecology, 2013). No Threatened or Priority flora species were recorded during the survey (Outback Ecology, 2013, Botanica, 2019; Botanica Consulting, 2021).

A detailed fauna survey was undertaken over the application area by Terrestrial Ecosystems in February 2012, with a subsequent reconnaissance survey undertaken by Botanica Consulting in January 2021. Two broad fauna habitats were identified within the application area, both of which are common and widespread in the local and regional area (Botanica Consulting, 2021; Terrestrial Ecosystems, 2012).

A number of introduced flora species were identified within and surrounding the application area (Botanica, 2021; Outback Ecology, 2013). Weeds have the potential to significantly change the dynamics of a natural ecosystem and lower the biodiversity of an area. Potential impacts to the biodiversity as a result of the proposed clearing may be minimised by the implementation of a weed management condition.

The vegetation associations, fauna habitats and landform types present within the application area, are well represented in surrounding areas (Botanica, 2021; GIS Database). The application area is unlikely to represent an area of higher biodiversity than surrounding areas, in either a local or regional context.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology

Botanica Consulting (2019)
 Botanica Consulting (2021)
 CALM (2002)
 Outback Ecology (2013)
 Terrestrial Ecosystems (2012)

GIS Database:

- IBRA Australia
- Pre-European Vegetation
- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

- Threatened and Priority Flora
- Threatened Fauna

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.

Comments Proposal is not likely to be at variance to this Principle

A detailed fauna survey was undertaken over the application area by Terrestrial Ecosystems in February 2012, with a subsequent reconnaissance survey undertaken by Botanica Consulting in January 2021.

The following two fauna habitats have been recorded within the amendment area (Terrestrial Ecosystems, 2012; Botanica Consulting, 2021):

- Clay-Loam Plain: Eucalypt Woodland; and
- Hillslope: Eucalypt Woodland.

These habitat types are common and widespread in the local and regional area, and no unique features such as caves, rocky outcrops, overhangs or crevices were identified within the amendment area (Botanica Consulting, 2021). No conservation significant species were identified during the surveys, however three species were identified to potentially utilise the area based on the habitats present and, in some cases, direct observations or recent nearby records (Botanica Consulting, 2021):

- Malleefowl (*Leipoa ocellata* – Vulnerable): No evidence of active malleefowl activity (active mounds, tracks, feathers or bird observations etc.) were observed within the survey area (Botanica Consulting, 2021). This species has previously been recorded within the local area, although most nearby records are over 20 years old (Botanica Consulting, 2021). It is not expected that the proposed clearing will impact this species or its habitat.
- Peregrine Falcon (*Falco peregrinus* – Other Specially Protected Species): This species may potentially utilise some sections of the amendment area as part of a much larger home range, though records in this area are uncommon. It is considered unlikely to breed within the broader survey area (Botanica Consulting, 2021). It is not expected that the proposed clearing will impact this species or its habitat.
- Central Long-eared Bat (*Nyctophilus major tor* – Priority 3): The broader survey area contains some suitable habitat for this species to use for foraging and possibly roosting (Botanica Consulting, 2021). The species has been recorded in nearby areas in the past but it would appear to be uncommon in the general area given the lack of documented records from other surveys where bat detectors have been deployed (Botanica Consulting, 2021). It is not expected that the proposed clearing will impact this species or its habitat.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Botanica Consulting (2021)
Terrestrial Ecosystems (2012)

GIS Database:

- Imagery
- Pre-European Vegetation
- Threatened Fauna

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.

Comments Proposal is not likely to be at variance to this Principle

There are no known records of Threatened flora within the application area (GIS Database). Flora surveys of the application area did not record any species of Threatened flora (Botanica, 2019; Outback Ecology, 2013).

The vegetation associations within the application area are common and widespread within the region (Botanica, 2019; Outback Ecology, 2013; GIS Database), and the vegetation proposed to be cleared is unlikely to be necessary for the continued existence of any species of Threatened flora.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Botanica (2019)
Outback Ecology (2013)

GIS Database:

- Pre-European Vegetation
- Threatened and Priority Flora

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

Comments Proposal is not likely to be at variance to this Principle

There are no known Threatened Ecological Communities (TECs) located within or in close proximity to the application area (GIS Database).

A flora and vegetation survey of the application area did not identify any TECs (Botanica, 2019; Outback Ecology, 2013).

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Botanica (2019)
Outback Ecology (2013)

GIS Database:

- Threatened and Priority Ecological Communities Boundaries
- Threatened and Priority Ecological Communities Buffers

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments Proposal is not at variance to this Principle

The application area falls within the Coolgardie Bioregion of the Interim Biogeographic Regionalisation for Australia (IBRA) (GIS Database). Approximately 97% of the pre-European vegetation still exists in the IBRA Coolgardie Bioregion (Government of Western Australia, 2019). The application area is broadly mapped as Beard vegetation associations 501: Medium woodland; goldfields blackbutt; and 506: Succulent steppe with woodland; salmon gum and bluebush (GIS Database). Approximately 99% of the pre-European extent of each of these vegetation associations remains uncleared at both the state and bioregional level (Government of Western Australia, 2019).

Therefore, the application area does not represent a significant remnant of native vegetation in an area that has been extensively cleared.

	Pre-European area (ha)*	Current extent (ha)*	Remaining %*	Conservation Status**	Pre-European % in DBCA managed lands
IBRA Bioregion – Coolgardie	12,912,204	12,648,491	~97	Least Concern	16
Beard vegetation associations – WA					
501	48,022	47,889	~99	Least Concern	14
506	98,187	98,050	~99	Least Concern	12
Beard vegetation associations – Coolgardie Bioregion					
501	43,938	43,805	~99	Least Concern	15
506	98,187	98,050	~99	Least Concern	12

* Government of Western Australia (2019)

** Department of Natural Resources and Environment (2002)

Based on the above, the proposed clearing is not at variance to this Principle.

Methodology Department of Natural Resources and Environment (2002)
Government of Western Australia (2019)

GIS Database:

- IBRA Australia
- Pre-European Vegetation

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposal is at variance to this Principle

There are no permanent watercourses or wetlands within the area proposed to clear (Botanica, 2019; Outback Ecology, 2013); GIS Database). Two seasonal creek lines pass through the application area (GIS Database).

Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall (BoM, 2022).

It is noted that vegetation type AbEaTSL is described as being associated with drainage lines with its description being 'open tussock grassland in drainage lines on low broad ridges and minor drainage lines of orange brown clay.'

Based on the above, the proposed clearing is at variance to this Principle. Potential impacts to vegetation growing in association with watercourses may be minimised by the implementation of a watercourse management condition.

Methodology BoM (2022)
Botanica (2019)
Outback Ecology (2013)

GIS Database:
- Hydrography, Lakes
- Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal may be at variance to this Principle

The application area is located within the Kalgoorlie Province, which consists of undulating plains (with some sandplains, hills and salt lakes) on granitic rocks and greenstone of the Yilgarn Craton. Soils comprise of calcareous loamy earths and red loamy earths with some salt lake soils, red deep sands, yellow sandy earths, shallow loams and loamy duplexes (Botanica, 2019; GIS Database).

The Kalgoorlie Province is further divided into seven soil-landscape zones, with the survey area located within the Kambalda Zone (Botanica, 2019). This zone is characterised by flat to undulating plains (with hills, ranges and some salt lakes and stony plains) on greenstone and granitic rocks of the Yilgarn Craton. Soils include calcareous loamy earths and red loamy earths with salt lakes soils and some red-brown hardpan shallow loams and red sandy duplexes.

The Kambalda Zone is further divided into soil landscape systems with the survey area located within the two landscape systems (GIS Database):

- AC1: Gently sloping to gently undulating plateau areas, or uplands, on granites, gneisses, and allied rocks, with long gentle slopes and, in places, abrupt erosional scarps; and
- Mx43: Gently undulating valley plains and pediments; some outcrop of basic rock (GIS Database).

Whilst Mx43 is generally not susceptible to erosion, there is potential for erosion to occur within landscape system AC1, and therefore it is important to minimise the length of time the land is left open following clearing. Potential impacts from the proposed clearing may be minimised by the implementation of a staged clearing condition.

Based on the above, the proposed clearing may be at variance to this principle.

Methodology Botanica (2019)

GIS Database:
- Landsystem Rangelands
- Soils, Statewide

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

Comments Proposal is not likely to be at variance to this Principle

The application area is located within the Randell Timber Reserve (Botanica 2019; GIS Database). The condition of the vegetation in the Randell Timber Reserve has been previously degraded by stock and feral animals (Botanica 2019; Outback Ecology, 2013), and historical mineral production has occurred within the application area (GIS Database). The Randell Timber Reserve is managed by the Department of Biodiversity, Conservation and Attractions. Previous advice from DBCA (2019) indicates that the proposed clearing is not expected to significantly impact on the flora or vegetation values of the reserve. Given the section of the application area within the Randell Timber Reserve has been previously degraded by mining and grazing and the proposed clearing is to occur predominantly adjacent to existing roads and infrastructure, the proposed clearing is not likely to have a significant additional impact on the environmental values of the Randell Timber Reserve.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology Botanica (2019)
DBCA (2019)
Outback Ecology (2013)

GIS Database:
- DPaW Tenure

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

Comments **Proposal is not likely to be at variance to this Principle**

There are no Public Drinking Water Source Areas within or in close proximity to the application area (GIS Database). There are no permanent watercourses or wetlands within the area proposed to clear (GIS Database). Creek lines in the region are dry for most of the year, only flowing briefly immediately following significant rainfall. The proposed clearing is unlikely to result in significant changes to surface water flows.

The proposed clearing is unlikely to cause deterioration in the quality of underground water.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Database:
- Hydrography, Linear
- Public Drinking Water Source Areas

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments **Proposal is not likely to be at variance to this Principle**

The climate of the region is semi-arid, with a low average rainfall of approximately 265.6 millimetres per year (BoM, 2022). Drainage lines in the area are dry for most of the year, only flowing briefly immediately following significant rainfall.

There are no permanent water courses or waterbodies within the application area (GIS Database). Seasonal drainage lines are common in the region and temporary localised flooding may occur briefly following heavy rainfall events. However, the proposed clearing is unlikely to increase the incidence or intensity of natural flooding events.

Based on the above, the proposed clearing is not likely to be at variance to this Principle.

Methodology BoM (2022)

GIS Database:
- Hydrographic Catchments - Catchments
- Hydrography, linear

Planning Instrument, Native Title, previous EPA decision or other matter.

Comments

The clearing permit application was advertised on 9 August 2021 by the Department of Mines, Industry Regulation and Safety (DMIRS), inviting submissions from the public. No submissions were received in relation to this application.

There is one native title claim (WC2020/005) over the area under application (DPLH, 2022). This claim has been registered with the National Native Title Tribunal on behalf of the claimant group. However, the mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore, the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2022). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

Methodology DPLH (2022)

4. References

- BoM (2022) Bureau of Meteorology Website – Climate Data Online, Weather Station Name. Bureau of Meteorology. <http://www.bom.gov.au/climate/data/> (Accessed 21 March 2022).
- Botanica Consulting (2019) Flora/Vegetation Survey Santa Project. Report prepared for Silver Lake Resources Limited, by Botanica Consulting, September 2019.
- Botanica Consulting (2021) Reconnaissance Flora/Vegetation & Basic Fauna Survey, Mt Belches Accommodation Camp. Report prepared for Silver Lake Resources Limited, by Botanica Consulting, January 2021.
- CALM (2002) A Biodiversity Audit of Western Australia's 53 Biogeographic Subregions in 2002. Department of Conservation and Land Management, Western Australia.
- DBCA (2019) Advice received in relation to Clearing Permit Application CPS 8329/1. Regional Manager – Goldfields Region, Conservation, Department of Biodiversity, Conservation and Attractions, Western Australia, February 2019.
- Department of Natural Resources and Environment (2002) Biodiversity Action Planning. Action planning for native biodiversity at multiple scales; catchment bioregional, landscape, local. Department of Natural Resources and Environment, Victoria.
- DPLH (2022) Aboriginal Heritage Inquiry System. Department of Planning, Lands and Heritage. <https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS> (Accessed 22 March 2022).
- Government of Western Australia (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. <https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Outback Ecology (2013) Randall's Gold Project – Santa Deposit. Level 2 Flora and Vegetation Survey. Prepared for Integra Mining Limited, January 2013.
- Terrestrial Ecosystems (2012) Fauna Assessment for the Santa Area. Report prepared for Integra Mining Limited, by Terrestrial Ecosystems, May 2012.

5. Glossary

Acronyms:

BC Act	<i>Biodiversity Conservation Act 2016, Western Australia</i>
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DAWE	Department of Agriculture, Water and the Environment, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DoEE	Department of the Environment and Energy (now DAWE)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	<i>Environmental Protection Act 1986, Western Australia</i>
EPA	Environmental Protection Authority, Western Australia
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Federal Act)</i>
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	<i>Rights in Water and Irrigation Act 1914, Western Australia</i>
TEC	Threatened Ecological Community

Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia):-

T **Threatened species:**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR Critically endangered species

Threatened species considered to be "*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

Threatened species considered to be "*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU Vulnerable species

Threatened species considered to be "*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct Species:

EX Extinct species

Species where "*there is no reasonable doubt that the last member of the species has died*", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

Species that "*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P Priority species:

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

P1 Priority One - Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

P2 Priority Two - Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

P3 Priority Three - Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

P4 Priority Four - Rare, Near Threatened and other species in need of monitoring

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

